

and Wales: 1851 to 1931" and "Marriage Frequency and Economic Fluctuations in England and Wales: 1851 to 1934." The grants which made both these researches possible were provided by the Population Investigation Committee. In the first, the gross reproduction rates of fifty-four Registration Counties of England and Wales are given for seven census periods, as well as similar rates for certain selected districts for five such periods. The data do not suggest that the decline in fertility which has taken place everywhere has been significantly affected by the amount of marriage or by the extent of female employment or by the occupational type of the district. The factors at work, it is concluded, are common to all parts of the country and equally powerful in all occupational patterns. The paper on marriage fluctuations describes a refined index of the frequency of marriage and concludes that the relation between marriage frequency and economic prosperity has been less close in the twentieth than in the nineteenth century, and that it may well become still less close in the future. Dr. Enid Charles contributes three papers, one written in collaboration with Miss Pearl Moshinsky. Of particular interest is a description of the changing structure of the family in Australia—a country well equipped for such an inquiry with vital statistics.

The second part of the volume is entitled "The Recruitment of Social Personnel" and contains five papers, two by J. L. Gray in collaboration with Pearl Moshinsky, one by J. L. Gray and D. V. Glass, one by Enid Charles and David Morgan, and one on the Distribution of Blood Groups and the Conception of Race by Alison Davis. The first four papers establish the obvious thesis that the opportunities of a higher education are many times more available to able children if their parents can pay for it than if they cannot. Stress is also laid on the less recognized fact that the elementary schools contain many working-class children sufficiently endowed with above-average ability to deserve a higher education, who cannot enjoy this advantage because their parents cannot afford to pay the necessary educational fees.

Much inherent working-class ability is thus "wasted" in the sense that it is not put to its best use. But the wastage is easier to assess than to remedy. Indeed, it is difficult to see how such wastage can be avoided otherwise than by very drastic reforms in our educational system or by an equally drastic levelling of the distribution of wealth. The costs of all forms of higher education would have to be so reduced as to make such education available for the children of parents in the lowest income-groups; or else incomes would have to be so equalized as to make it impossible for some people to buy educational advantages for their children while others could not.

The papers in this volume are nearly all statistical in character and the numerous tables and figures account for its high price. The book testifies impressively to the industry of the workers in the Department of Social Biology of the London School of Economics, and is a worthy expression of the inspiration which Professor Hogben has communicated to those who worked under him.

The study of eugenics has been profitably stimulated by Professor Hogben; it is largely through his influence that many of us have become more critical than we were of some traditional postulates as to the importance of heredity, and more diffident in generalizing about the genetic effects of certain eugenic measures. Professor Hogben has made it appreciably more difficult to give a simple lecture on eugenics. For all this we are grateful to him. Let us hope that in time the Austrian Economists (if there are any left) will have equal cause to be grateful.

C. P. BLACKER.

Titmuss, Richard M. *Poverty and Population*. With a Foreword by Lord Horder. London, 1938. Macmillan. Pp. xxviii+320. Price 10s. 6d.

THE subject of this excellent and timely book is premature death. The careful analysis made by Mr. Titmuss of regional differential mortality is a valuable contribution to a neglected aspect of population trends in this

country. Average mortality rates for the whole country may be reassuring, but they are often highly misleading. They tend to conceal more than they reveal. Mr. Titmuss is to be congratulated for the pains he has taken to get behind the national averages to the less well-known facts of regional variations in death-rates, and to the story of ill health and social misery which they tell. Equally impressive is his diagnosis of the causation of premature mortality. "It is both illogical and inefficient," writes the author, "to contemplate inducing people to have more children until we have judged the extent of contemporary waste in human life. It is a sobering thought that the House of Commons, in debating the declining birth-rate in February 1937, contrived to fill fifty-four columns of Hansard without calling for an assessment of present-day premature mortality."

The present *Konjunktur* of population movements forms the background of the book. "But for the higher fertility of the North and Wales in the past, the population of this country would by now be declining," states Mr. Titmuss. He calculates that if the low birth-rates (per 1,000 women aged 15-44) of the eleven south-eastern counties in the decade 1927-36 had prevailed over the whole of England and Wales our child population would have been reduced by *half a million*. Half of this reduction would have occurred in the North and Wales. Yet in many of these very regions, the high fertility of which has been maintaining the nation's numbers in recent years, there exists also an excessive wastage of human lives. How far is the community being deprived by premature mortality of the full fruits of its (humanly) most fertile regions? Why is it that life is less safe in those areas which are contributing most to the maintenance of our numbers?

To answer the first question, Mr. Titmuss uses the mortality rates of the eleven South-Eastern counties as a standard by which to measure excess mortality in the other regions into which the Registrar-General divides England and Wales. Such a procedure is both legitimate and realistic. "The primary object is not to use some Utopian

standard of health but to assess *what has already been done in preventing premature death* and thereby to measure the extent of the surplus and unnecessary mortality in the North and Wales."

The results are startling and disturbing. A survey of mortality among infants, children, mothers and adults generally leads to the conclusion that, on the basis of the death-rates in the South-Eastern counties, there have occurred "the unnecessary and untimely deaths of 150 men, women and children every day in the North and Wales throughout at least the last ten years, culminating in a total social waste of over 500,000 human beings."

In 1936, in the North and Wales alone, Mr. Titmuss assesses the number of premature deaths at 54,000. "If these lives had been suddenly—and sensationally—terminated in some tremendous catastrophe, revulsion would have swept the country. . . . But allow these men, women and children, through poverty and a revolting environment, to sink slowly from one stage of degradation to the next and ultimately to take prematurely their allotted places in the Registrar-General's return — then nothing stirs to ruffle the insulated calm of the nation."

With regard to infant mortality Mr. Titmuss establishes an excess of 5,000 deaths in the North and Wales, as compared with the South-East. The realization of a mortality rate of 45 per 1,000 live births over the whole of England and Wales would effect an annual saving of 8,000 infant lives. The national maternal mortality rate is the most misleading of all. In 1936 it was lower than in any year since 1922. Yet Mr. Titmuss points out that "the maternal mortality rate . . . for every year from 1911 to 1936 inclusive for England and Wales has never exceeded, and has generally been well below, the 1936 rate for the North. . . . Prior to 1911, and on the basis of the classification in use after 1911, one has to go back to before 1896 to find a rate for maternal mortality for England and Wales that exceeds the 1936 rate for Durham and Northumberland and the whole of Wales."

These are only two instances selected from the great mass of material presented by the author in his chapters on differential mortality and on the regional incidence of the chief "killing diseases." Even in the case of cancer, that impartial slayer of all classes, he finds an excess of deaths in the North and Wales, attributable to poverty which results in inadequate attention to a disease often curable in its early stages.

Mr. Titmuss's discussion of causes is highly valuable. The merit of his chapters on the "Dynamics of Premature Death" and the "Impact of Unemployment on Mortality" is not that they present new facts, but that, almost for the first time, all the most significant results of a great mass of previous research are assembled and built into a coherent picture of present social conditions. The unmistakable conclusion of this aetiological survey is that "poverty and a revolting environment" are by far the most important causes of premature death, and *a fortiori* of avoidable ill health. The regions where deaths accumulate are the regions which are the poorest, where unemployment, malnutrition, bad housing, and ill health are most prevalent. They are reservoirs of lowered vitality.

The light thrown indirectly by this book upon the state of health of the community reveals a condition that must be highly alarming to anyone who takes national fitness seriously. In 1936 the Army would have gained 6,000 additional recruits had the rate of rejection of applicants over the whole of England and Wales been no higher than the rate in the Home Counties (i.e. one-third of all rejected would have been taken). Mr. Hore-Belisha's Physical Development Depôt has achieved splendid results, through careful feeding and training, but at a very high cost. As Mr. Titmuss remarks, six to twelve years have elapsed since the time when the additional food and milk supplied in the Depôt would certainly have been more beneficial to the unhealthy recruits. Yet, he points out, "paradoxically, the nation considers 3s. per week* sufficient

to maintain one child in health, yet if the child should be certified as mentally defective 30s. per week for life would be spent on its maintenance."

Mr. Titmuss's survey leaves no doubt that the key to the gigantic problem of poverty is adequate nutrition. Better housing and better health services are undoubtedly needed, but it is impossible, after the work of Lady Juliet Williams, not to agree with the remark of the *Medical Officer* that the reduction of excessive maternal mortality (and of other kinds of mortality) "is more likely to be achieved by a herd of cows than by a herd of specialists."

In a period when discussion of the means of promoting the birth-rate is becoming general, and when the community is becoming conscious of the need for national fitness it is well that these unpleasant facts should be stated again and again. Children are becoming increasingly rare; is it not vital that premature deaths should be reduced to a minimum? An expanding community cannot afford to be extravagant with its human material; a community at our stage of development will hasten its decline if it does not treasure its future citizens.

Mr. Titmuss does not claim that the elimination of excessive mortality can itself solve the present problem; but he does suggest that it would make the task of promoting fertility an easier one. It is difficult to dissent from this view. There is some evidence that, with the spread of voluntary parenthood (which eugenicists quite rightly encourage), poverty may in the future act as a check upon fertility. Population students must not overlook the fact that improvements in contraceptive technique may well generalize voluntary parenthood in the not very distant future. The invention of a fool-proof contraceptive would probably lead to a catastrophic fall in the birth-rate. In such circumstances differential fertility might well prove to be, as Dr. Enid Charles has suggested, but an ephemeral phenomenon. The poor man might turn voluntary parenthood into voluntary childlessness as a method of avoiding greater poverty. In a democratic community adverse economic

* The standard unemployment benefit rate.

circumstances would probably prevail over the poor man's inclinations to parenthood, and he would not again cease to limit his offspring until parenthood had been made not merely honourable but perhaps even profitable as well. In such circumstances nothing short of far-reaching measures to alleviate poverty are likely to induce the mass of poor folk to add to their children since they possess the means of avoiding parenthood.

Mr. Titmuss is concerned with "national fitness" in the ordinary sense. He cannot therefore be blamed for devoting but a few pages to the problem of mental fitness. His statistical analysis, which might on some points be queried by specialists, seems on the whole admirably suited for the average intelligent reader to whom his book is addressed. It does undoubtedly present a picture of sufficient general accuracy to be impressive in its total effect. It is to be hoped that the book will stimulate the production of further studies in the same field.

FRANÇOIS LAFITTE.

McCleary, G. F. *Population: To-day's Question*. Pp. 222. Allen & Unwin, London, 1938. Price 6s.

DR. MCCLEARY has the rare gift of clear, as well as accurate exposition. His new book is a model of what can be done to explain a complex subject in non-technical language, without shirking any of the difficulties which arise. Beginning with a survey of theories of Malthus, Dr. McCleary proceeds to analyze the main factors in the unprecedented growth of population in the nineteenth century, and to discuss the implications of the recent decline in fertility. The construction and significance of the net reproduction rate is dealt with, and an account given of Burgdörfer's "refined" balance of births and deaths. The author then goes on to a study of world reproductive trends, and the factors which have influenced them, and includes a brief but extremely interesting discussion of the part played by birth control as a mechanical means, and of

"social capillarity" as an underlying motive. The final chapters deal with the possible social and economic consequences of a declining population, with the aims and results of various population policies, and with the subject of differential fertility.

There are very few points on which one could offer criticism. But when a new edition is prepared there are one or two suggestions which might perhaps be considered. First, the treatment of the "law of diminishing returns" might be extended. The present view of economists is that this "law" is a purely technological one, expressing what would happen at a point of time if variable quantities of one factor were applied to a fixed quantity of another factor. It has no relation to what may happen over a period of time, and clearly we might have historically increasing returns while the "law" was true of any point of time in the period. Secondly, Dr. McCleary considers that abortion has played only a minor part in bringing down the British birth-rate. So far, no investigation along the lines of that conducted by Professor Pearl has yet been undertaken in this country. Yet the evidence given by Dr. Elderton in her monumental work (*Report on the English Birth-Rate*, Part I, England North of the Humber, 1914) tends to show that abortion has been used to a considerable extent for limiting families. Finally, it would be useful to include, in the chapter on the consequences of a declining population, some discussion of the international problems which might arise out of differential rates of decline. These, of course, are merely personal suggestions. They do not in any way detract from the excellence of Dr. McCleary's book.

D. V. GLASS.

Holmes, S. J. *The Negro's Struggle for Survival: A study in human ecology*. California, 1937. University of California Press. Pp. xii+296. Price \$3.00.

In this work, Professor Holmes has presented the principal data available on the vital statistics of the negro population. This